



CITY OF
TUCSON

DEPARTMENT OF
URBAN PLANNING
& DESIGN

October 8, 2004

The Honorable Mayor and Members of the Council
City of Tucson
P.O. Box 27210
Tucson AZ 85726-7210

Subject: ***LAND USE CODE (LUC) AMENDMENT –
AIRPORT ENIRONS ZONE (AEZ)***

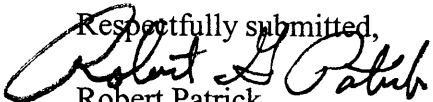
A study session was held on August 4, 2004, and a public hearing on September 1, 2004. The public hearing was continued to October 6, 2004, to address the above referenced proposed amendment to the *Land Use Code (LUC)*.

Urban Planning and Design staff presented general content of the amendments and information concerning the statutory requirements associated with adopting the amendments. Approximately 35 members of the public spoke in opposition to the amendment at the public hearings, commenting on noise and property value impacts, the cost of sound attenuation requirements, the need for an Environmental Impact Statement (EIS) and air pollution. Colonel Isherwood with Davis-Monthan presented information regarding military base operations and planning.

RECOMMENDATION

The Commission discussed the amendments after closing the public hearing. Members expressed concern that the amendment appears to go beyond the requirements of JLUS and questioned whether it was necessary to adopt the amendments at this time. The Planning Commission suggests, 1) pursuing land swaps, transfer of development rights, and purchases, 2) community education and, 3) aggressively pursuing appropriations for sound attenuation. The Commission voted unanimously (13-0, Evans, Gastelum, Hamed, Kaucher, Lawrence, Lurie, McBride-Olsen, Metcalf, Patrick, Powers, Sayler-Brown, Thomson, and Williams) to recommend that Mayor and Council take no action on the proposed AEZ amendment, extend the interim regulations to December 31, 2005, and send the proposed amendment back to the Planning Commission to resolve the issues.

Respectfully submitted,


Robert Patrick
Planning Commission Chair

Frequently Asked Questions - City of Tucson Airport Environs Zone Land Use Code Amendment

Q: What is the Airport Environs Zone (AEZ)?

A: The AEZ is an overlay zone applied to areas around Tucson International Airport (TIA) and Davis-Monthan Air Force Base (DM) in which specific zoning regulations apply.

Q: What is an overlay zone?

A: An overlay zone does not replace the underlying zoning of a property (such as R-1, residential zoning). Instead, an overlay zone typically adds additional requirements to properties within that zone.

Q: What is the Davis-Monthan Airport Environs Zone Code Amendment?

A: The amendment is a change to the zoning regulations that apply to properties around Davis-Monthan. The amendment includes areas at the end of the runway known as Approach-Departure Corridors (ADC) and high noise areas known as Noise Control Districts (NCD). The ADCs and NCDs are illustrated on the map and are the result of the recommendations of a "Joint Land Use Study".

Q: What is a Joint Land Use Study (JLUS)?

A: The Arizona Department of Commerce and the Department of Defense commissioned The Joint Land Use Study. It was conducted as part of a proactive statewide effort that addressed land use compatibility issues around Arizona's military airports. The JLUS involved representatives from property owners, DM, Pima County, the City of Tucson and elected officials.

Q: How will the AEZ affect my property?

A: The underlying or existing zoning of a property will not change as a result of the amendment. The amendment includes sound attenuation requirements for noise sensitive development and for additions to existing homes located within the Noise Control Districts. It also prohibits new residential development, churches, schools and day care centers in the Approach-Departure Corridors. The amendment *will not* require existing homes and buildings to be retrofitted, moved or demolished.

Q: Does the AEZ Code Amendment change the flight patterns or frequency of flights from DM?

A: No. The operations of DM are at the sole discretion of the United States Department of Defense.

Q: Will the physical boundaries of DM expand?

A: No. The AEZ Amendment does not affect the current boundaries of DM.

Q: How will this affect any future sale of my property?

A: Existing State law requires disclosure to the purchaser that property is within the vicinity of a military air base. The vicinity is defined by state law and is an area much larger than the AEZ.

Q: Is the City or DM planning to purchase homes?

A: No. Neither the City nor DM intends to purchase or remove existing residences in the developed part of the City in the AEZ.

Q: Why do we have to adopt these specific regulations with larger noise contours?

A: The Joint Land Use Study completed in February 2004, defines the larger noise contours in the DM environs to allow the community to plan for future military operations. Arizona Revised Statutes mandate that the contours established in the JLUS be used to better plan for the future by regulating incompatible land uses and requiring sound attenuation. In addition, A.R.S. requires the City to adopt and enforce zoning regulations for property in the high noise and accident potential zone to assure development that is compatible with military operations.

Q: Can't DM officials change the flight patterns to prevent flights over the City?

A: No. DM flight patterns are determined by several factors including the Federal Aviation Administration regulations, commercial flight patterns in and out of Tucson International Airport and specific DM procedures associated with training missions.

Q: Is the City or DM planning to pay for any required soundproofing on my home?

A: When the local municipalities adopt Joint Land Use Study (JLUS) regulations and when the 2005 Base Realignment and Closure (BRAC) round is over, there is likely to be strong bipartisan support for the Arizona Congressional delegation to secure an appropriation for a significant sound attenuation program.

Q: Why didn't the City do something before all the subdivisions in the area were built?

A: When Davis-Monthan Air Force Base was built in 1927, it was constructed to the southeast of existing city limits. Following World War II, Tucson experienced rapid growth which quickly spread towards, and around DM. This encroachment by development caused the Base and the City to take action. In 1990, the City passed the original AEZ ordinance that focused on regulating development around TIA and DM. Recent studies by the Air Force Base and the Arizona Department of Commerce have indicated that the area covered by the AEZ needs to be expanded. Under current State law, the City is required to amend the current Land Use Code and Airport Environs Plan to incorporate the recommendations of the JLUS.



6. IMPLEMENTATION PROGRAM

6.1 INTRODUCTION

The Joint Land Use Study (JLUS) for Davis-Monthan Air Force Base is intended to guide the decisions made by a variety of public and private entities in relation to compatible land use around the Base. In addition to the State of Arizona and its agencies, the Base, local jurisdictions, and private interests within the area can contribute to the implementation of the recommendations of the JLUS.

The Compatible Land Use Plan presented in Chapter 5 of this JLUS defines recommended compatible uses and performance standards that are intended to be used by the City of Tucson and Pima County to guide development in order to protect Davis-Monthan's mission and its economic benefits, while increasing the economic diversity and viability of the community by facilitating the development of other key sectors in ways that are compatible with the Base's mission. Implementation of the Compatible Use Plan is fundamental to achieving these goals and integration of land use recommendations into general and comprehensive plans and zoning ordinances is a key element in implementing the JLUS. However, successful implementation requires that other tools be utilized to achieve the JLUS goals. These tools are contained in the implementation program presented in the following sections.

The implementation program has been developed in recognition of the ongoing planning by the Base and jurisdictions, as well as considering the divergent viewpoints expressed through the public participation process, and the need to present strategies that realistically accomplish the goal of preserving Davis-Monthan Air Force Base and its mission. While the changing nature of economics and politics may change the scope and timing of the implementation strategies, these recommendations provide the framework and guidance for achieving long-term compatibility of development with the Base and its mission.

The following sections present the recommended Implementation Strategies. Three aspects of implementation that are integral to the process follow a brief description of each strategy. The first aspect of implementation, **Priority/Timing**, establishes the importance of the action and the time frame within which the Strategy is to be effected, as follows:

- High — by January, 2005,
- Moderate — within 2–3 years, that is by January 2007, or
- Low — 4–5 years, that is by January 2009.

The second aspect of implementation, **Responsible Party(s)**, indicates the governmental agency, local political jurisdiction, and other parties responsible for implementing the Strategy. The third aspect of implementation, **Evaluation Measures**, presents recommendations concerning review and monitoring to facilitate adjustments if the strategy is not meeting its desired results. One of the appropriate functions for the State

would be to monitor the implementation and effectiveness of the recommended measures through the Arizona Department of Commerce or other State agency.

6.2 IMPLEMENTATION STRATEGIES

6.2.1 Joint Land Use Study Recognition

While the JLUS is not adopted in the traditional sense by local jurisdictions and is not a legal document, the completion of the JLUS and its status as guidance for land use decisions in the vicinity of Davis-Monthan Air Force Base should be recognized by the City of Tucson, Pima County and the Base. Appendix C contains a model resolution for consideration by the City and County.

- Priority/Timing – High
- Responsible Party(s) – City of Tucson, Pima County and Davis-Monthan AFB
- Evaluation Measures – Resolution or similar official acknowledgement adopted in 2004

6.2.2 Revision of Airport Environs Zone Plans and Ordinances

The Compatible Land Use Plan of the JLUS study defines compatible land uses for APZ-I, APZ-II, the Approach-Departure Corridor and high-noise zones around Davis-Monthan Air Force Base. The Airport Environs Zone plans and ordinances of the City of Tucson and Pima County are the primary means of implementing the recommended compatible uses. Both the City and County should review their respective plans and ordinances to identify changes that are necessary to implement the recommended compatible uses and prepare necessary amendments to the plans and ordinances for consideration and adoption by their respective governing bodies. The City and County should also utilize the notional noise contours, as recommended in the JLUS, as the basis for defining high-noise zones.

- Priority/Timing – High
- Responsible Party(s) – City of Tucson and Pima County
- Evaluation Measures – Plan and Zoning Ordinance amendments adopted in 2004

6.2.3 Support for Recommendations of the Governor's Military Facilities Task Force

The Governor's Military Facilities Task Force has made recommendations to the Governor relating to actions needed at the federal, State and local levels to ensure the long-term viability of military installations and resources. A number of these recommendations, including the designation of dedicated funding to assist military installation preservation and expansion projects, and the expansion of county planning and zoning authority (equivalent to current municipal authority) to enable them to better manage growth and development in areas impacted by military airports, involve legislative action and are of particular interest for implementing the JLUS recommendations for Davis-Monthan Air Force Base. The City and County, along with the DM-50 and other interested groups should actively support the implementation of the recommendations of the Governor's Military Facilities Task Force at the State level.

- Priority/Timing – High

- Responsible Party(s) – City of Tucson, Pima County, DM-50, and other organizations
- Evaluation Measures – Enactment of the legislative recommendations of the Governor's Task Force

6.2.4 Support for Recommendations of the State Trust Land Reform Group

The State Trust Land Reform group is considering a recommendation that a mechanism be developed to allow for the exchange of land in support of planning and disposition of State Trust land in support of the long-term preservation of Arizona's military installations. The ability for the State Trust to engage in land exchanges and the ability to transfer densities and land uses between various State Trust lands is potentially an important element for achieving compatibility in the development of State Trust lands in the Approach-Departure Corridor. As the mechanism to allow this will likely require legislative action and/or a vote of the electorate to modify the State Constitution, the City of Tucson, Pima County, DM-50, and other interested organizations should actively support the recommendations of the State Trust Land Reform Group.

- Priority/Timing – High
- Responsible Party(s) – City of Tucson, Pima County, DM-50 and other organizations
- Evaluation Measures – Enactment of the legislative recommendations of the State Lands Reform Group

6.2.5 Ongoing Organization for JLUS Implementation

Efficient and effective communication between the City of Tucson, Pima County, area landowners, other local organizations and Davis-Monthan AFB is critical to the successful implementation of the JLUS. To provide a means to maintain communication and coordination as the JLUS recommendations are carried out, the City, County and Base should consider the formation of an ongoing coordinating committee. This committee, in addition to representatives from the City, County and Base, should include representatives from area landowners and other local organizations that have an interest in compatible land use around the Base. This committee could also serve as the interface with the State Military Affairs Commission proposed by the Governor's Military Facilities Task Force.

- Priority / Timing – High
- Responsible Party(s) – City of Tucson, Pima County, Davis-Monthan AFB, area landowners and other local organizations
- Evaluation Measures – Formation of committee by end of 2004; Operation of committee - Ongoing

6.2.6 Davis-Monthan AFB Community Initiatives Team

As a means of maintaining effective liaison between with the surrounding community, the Base should consider the formation of a dedicated "Community Initiatives Team." Made up of individuals with an understanding of base operations as well development issues, this team, working as part of the base's command structure, would focus on land use compatibility issues, and would serve as a consistent mechanism for outreach and input by surrounding communities on environmental and growth issues. The team would also be

tasked with working at the staff level with other implementing organizations during the JLUS implementation process.

- Priority / Timing – High
- Responsible Party(s) – Davis-Monthan AFB
- Evaluation Measures – Formation of Team by end of 2004; Operation of Team - Ongoing

6.2.7 Department of Defense Land Acquisition

The City of Tucson, Pima County, and other interested groups such as DM-50 should work with the State's Congressional delegation to obtain appropriations in the Department of Defense budget dedicated to the purchase of critical parcels around the Base, especially under the primary flight paths in the APZs and Approach-Departure Corridor. In addition to working for an appropriation in the next budget year (2005), efforts should be made for additional appropriations in the years following the 2005 BRAC round.

- Priority/Timing – High for the initial appropriation; moderate for subsequent appropriations
- Responsible Party(s) – City of Tucson, Pima County, DM-50, and other organizations, Arizona Congressional delegation
- Evaluation Measures – Appropriated funding in the Department of Defense budget

6.2.8 Department of Defense Purchase of Conservation Easements

The Department of Defense (DOD) is implementing a program of purchase of conservation easements around military installations in order to address environmental and encroachment issues.

The "Bob Stump National Defense Authorization Act" for Fiscal Year 2003 (P.L. 107-314) provided new statutory authority that permits the Department of Defense enter into agreements with eligible entities to address the use or development of real property near a military installation, and to accept on behalf of the United States Government any property or interest acquired pursuant to such agreements. The Department of Defense is working to determine how this new authority will be used, and each of the Military Departments are developing specific program guidance.

In general terms the new authority includes the following specific elements.

- Eligible entities are States, political subdivisions or private conservation organizations.
- The amendment provides for the acquisition by an eligible entity of all right, title, interest in and to any real property, and sharing by the Government and the entity in acquisition costs. The amendment also requires the entity, upon request of the DOD, to transfer to the Government the minimum property or interests necessary to avoid encroachment from the use or management of the property.
- Department of Defense funds may be used for such agreements for purchase from willing sellers. It is important to note that the amendment does not provide specific

funding for these purchases. The Department of Defense will determine if, and how much funding will be available for this initiative.

- The amendment also permits Department of Defense to convey surplus real property to states or other eligible entities for conservation of natural resources.

The City of Tucson and Pima County should work with Davis-Monthan Air Force Base and the Department of Defense to acquire conservation easements in appropriate locations within the Approach-Departure Corridor and APZs.

- Priority/Timing – High to Moderate
- Responsible Party(s) – City of Tucson, Pima County, Davis-Monthan Air Force Base, Department of Defense and private landowners
- Evaluation Measures – Completed purchase of conservation easements

6.2.9 Aerospace Maintenance and Regeneration Center (AMARC) Expansion

The City of Tucson and Pima County should continue to facilitate the land acquisition that has been proposed involving private landowners and Davis-Monthan Air Force Base for the expansion of the AMARC. This would result in approximately 600 acres of land in one of the APZs being secured for a compatible land use.

- Priority/Timing – High
- Responsible Party(s) – City of Tucson, Pima County, Davis-Monthan Air Force Base, and private landowners
- Evaluation Measures – Completed transfer of title of land for AMARC expansion

6.2.10 University of Arizona Science and Technology Park Development

Pima County should continue to work with the University of Arizona to develop the Science and Technology Park in a way that provides compatibility with the Base, while achieving the objective of developing the Park as a major economic driver for the Tucson area. Key elements to achieve compatibility include use of density transfers within the Park to shift employee density from the northern part of the park to the southern part; and limiting development of the Park to employment-generating uses within the first 30,000 feet of the Approach-Departure Corridor (specifically that a hotel not be developed within this area and that the existing high school use be relocated).

- Priority/Timing – High to Moderate
- Responsible Party(s) – Pima County and University of Arizona
- Evaluation Measures – Compatible Development under the Science and Technology Park's Master Plan

6.2.11 Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) was established by Congress in 1964 to create parks and open spaces, protect wilderness, wetlands, and refuges, preserve wildlife habitat, and enhance recreational opportunities. The LWCF has a matching grants program that provides funds to states for planning, developing and acquiring land and water areas for state and local parks and recreation areas. These funds could be used to

match state monies to purchase critical parcels of land around the Base for use as conservation/open space.

- Priority/Timing – High
- Responsible Party(s) – Federal and State governments
- Evaluation Measures – Use of land and water conservation funds as appropriate

6.2.12 Military Installation Fund

One of the recommendations of the Governor's Military Facilities Task Force is the creation of a Military Installation Fund (MIF), to be administered by the State and funded by dedicated revenue at the State level. The MIF, as envisioned by the Task Force, would provide grants to local governments for land acquisition or other activities to preserve or expand military installations. If this fund is established, the City and County should consider use of MIF funding to support acquisition of land or development rights in critical areas (most likely in combination with other funding), or for other activities that would support compatible land use.

- Priority/Timing – High to Moderate
- Responsible Party(s) – City of Tucson, Pima County and State of Arizona
- Evaluation Measures – Use of MIF funds as provided for in grant

6.2.13 Land Acquisition through Bonds

The City of Tucson and Pima County should consider a bond issue for purchasing land in critical areas of the APZs and Approach-Departure Corridor. Priority for purchase should be given to lands under the primary flight paths Communities that pursue land purchase can save money by using the Greater Arizona Development Authority (GADA). GADA is empowered by state statute to sell bonds at a lower interest rate by subsidizing the costs of issuance. All of the municipalities surrounding the military installations/facilities are eligible for the program. Participation in the GADA program requires that there be an estimate of the total cost of the land to be purchased and a determination that GADA has enough capacity to loan.

- Priority/Timing – Moderate to Low
- Responsible Party(s) – City of Tucson and/or Pima County and Greater Arizona Development Authority
- Evaluation Measures – Issuance of bonds for acquisition of land

6.2.14 Purchase of Development Rights

An alternative to the purchase of land is the purchase of development rights which would be negotiated with the owner of the development rights. Participation in the purchase of development rights would be voluntary on the part of the owner. This type of acquisition may be effective in appropriate situations and areas, particularly where the issue of compatibility involves density of development rather than the type of land use proposed. When development rights are purchased, a landowner is paid fair market value for the rights that are purchased. The value of the purchased rights is roughly equal to the value of the land without any special restriction less the value of the land with the land use

restrictions. The use of this strategy would be dependent on securing funding for the purchase through one of the other strategies identified in this chapter.

- Priority/Timing – High to Moderate
- Responsible Party(s) – Federal government, State government, and local jurisdictions
- Evaluation Measures – Development Rights are purchased

6.2.15 Transfer of Development Rights

The use of Transfer of Development Rights (TDRs) can reduce the intensity and density of use in areas identified as significant to preserving the Base's mission while increasing density in other areas by encouraging local political jurisdictions to create incentives for developers to use the density transfer technique in appropriate situations and areas in proximity to the Base. The transfer of development rights is similar to the purchase of development rights, except rather than a public agency buying development rights, which are then in effect "retired," the landowner is compensated by having the permitted uses of other land expanded or intensified. The land to which the rights are transferred may be either owned by the landowner, or by someone else. In the latter case, compensation is paid to the "sending" landowner by the "receiving" landowner. Participation in TDR programs would be voluntary on the part of the landowner(s). Under the TDR scenario, the use of land currently zoned for lower intensity use outside the APZs could be modified to allow higher density development at the same time the use of land in the APZs currently zoned to permit higher density development would be restricted to lower density use.

- Priority/Timing – High to Moderate
- Responsible Party(s) – Local jurisdictions
- Evaluation Measures – TDR programs are adopted by the City of Tucson (and by Pima County, if State legislation is enacted to allow the County to use TDRs)

6.2.16 Partnerships with Non-Governmental Organizations to Facilitate Transfers of Development Rights

Governmental or non-governmental entities such as the Trust for Public Land (TPL), may acquire development rights for land adjacent to a military installation or facility, especially for land in the high hazard and noise zones, and dedicating it to uses compatible with military missions or to transferring those lands to public ownership for conservation or open space uses. TPL also has a program to assist communities in pursuing a preservation ballot initiative, providing services that include political analysis and campaign strategy.

- Priority/Timing – High to Moderate
- Responsible Party(s) – Local jurisdictions and TPL or other entity
- Evaluation Measures – TDR programs are adopted by the City of Tucson (and by Pima County, if State legislation is enacted to allow the County to use TDRs)

6.2.17 Noise Attenuation Retrofit Program

The City of Tucson should work with the State's Congressional delegation to secure a Department of Defense funded and administered program for noise attenuation retrofitting

of homes in the high-noise zones that is similar to the program that Tucson International Airport has had in operation since 1992. Through grants from the Federal Aviation Administration and the Arizona Department of Transportation, the Tucson Airport Authority is providing acoustic treatment to approximately 1,400 homes within the highest noise areas. Permanent-structure residences in the 65 Ldn noise contour and the 70 Ldn noise contour are eligible for the program. At no cost to eligible homeowners, the residences are retrofitted with acoustic windows and doors, ventilation systems are modified, and other improvements are made to drastically reduce interior noise levels.

- Priority/Timing – High to Moderate
- Responsible Party(s) – City of Tucson, State Congressional delegation, Department of Defense, and Davis-Monthan Air Force Base.
- Evaluation Measures – Noise Attenuation Retrofit Program in place

6.2.18 Adaptive Reuse of Julia Keen School

With the anticipated closure of Julia Keen School, which is located in one of the APZs northwest of the main Davis-Monthan runway, there is a need to find an adaptive reuse for the school that is compatible both with the operation of Davis-Monthan and with the surrounding neighborhood. The City of Tucson should work with the Tucson Unified School District and the Julia Keen neighborhood to bring an appropriate adaptive reuse to the school building so that it remains an asset for the neighborhood.

- Priority/Timing – High
- Responsible Party(s) – City of Tucson, Tucson Unified School District, local residents, and neighborhood organizations.
- Evaluation Measures – Implementation of adaptive reuse

6.2.19 Enhanced Local Notification and Disclosure

The Governor's Military Facilities Task Force is recommending that current notification and disclosure provisions in State law for military facilities be strengthened, including a recommendation that the Arizona Department of Real Estate develop a "rule" to strengthen and standardize the notification process for its licensees. Increasingly, communities have determined that there is value to their citizens in going beyond the minimum public notification and disclosure standards outlined in State law. Greater understanding of local military operations can also enhance the sustainability of the Base by building support for the Base's mission. Specific mechanisms to enhance public notification and disclosure may include:

- Requiring notices and maps to be posted in real estate sales and leasing offices, including identification of noise contours
- Requiring notices placed in model home complexes and sales offices advising potential buyers that the area is subject to military aircraft overflight
- Requiring aviation easements and indemnification/release of liability language on all recorded subdivision plats
- Installing overflight signage at roadway intersections within the noise contour lines

The City of Tucson and Pima County should consider the need for adopting specific additional methods of notification and disclosure.

- Priority/Timing – High to Moderate
- Responsible Party(s) – City of Tucson and Pima County
- Evaluation Measures – Enhanced Notification and Disclosure procedures in place

6.2.20 Best Practice Techniques

A process to assess the usefulness of various techniques used by other political jurisdictions with similar military air base encroachment issues is an effective means to ensure that the “best practices” are being used to guide development around Davis-Monthan Air Force Base and the State’s other military facilities. This evaluation of “best practice” techniques will need to determine their potential to be adapted to the needs of various political jurisdictions in the State, and the State will continue its role as convener and clearinghouse in these efforts. Other stakeholders are anticipated to participate in this data collection in support of the statewide effort. Results of the Best Practices research will be compiled into the State Policy Guide developed as part of the statewide effort by the Department of Commerce to address land use compatibility and encroachment issues under the Arizona Military Regional Compatibility Project.

- Priority/Timing – Development of State Policy Guide – High; continuing assessment is ongoing
- Responsible Party(s) – State government, local jurisdictions, and other stakeholder groups
- Evaluation Measures – Development of State Policy Guide and ongoing assessment

6.2.16 DEFINITIONS P

Protected Development Right Plan. A plan or subdivision plat which, at a minimum, describes with a reasonable degree of certainty (a) the proposed uses of the site, (b) the boundaries of the site, (c) significant topographical and other natural features affecting development of the site, (d) the number of dwelling units, and (e) the location of all existing and proposed utilities and a provision for other infrastructure on the site, including water, sewers, roads, and pedestrian walkways. A plan or subdivision plat for other than a Phased Development may be considered a Protected Development Right Plan only if, in addition to the foregoing requirements, it describes with a reasonable degree of certainty the square footage, height, and general location of the proposed buildings, structures, and other improvements and provides the final site development approval needed for issuance of a building permit. (Ord. No. 9635, §2, 12/10/01; Ord. No. 9750, §3, 8/5/02)

Response to Community Questions Regarding JLUS/AEZ Issues

Question 1) Table 5-1 in the Joint Land Use Study (JLUS) document indicates that 65-69 Ldn is “incompatible with residential use”. We understand that with the current zoning overlay change that thousands of residences will now be within these sound level contours. Will these people be compensated for their homes by the Federal Government, considering this change will make their homes unlivable?

Answer: The contours represent an average potential noise impact on the community. The City of Tucson uses the noise contours to require that new construction have sound attenuation to mitigate aircraft noise in those areas. The JLUS identifies residential uses as incompatible with base operations, and, people who live in the existing high noise areas as well as outside those specific boundaries have raised concerns about noise impacts. The purpose of the proposed regulations is to prevent additional residential development on vacant land in high noise areas. Existing homes that have been built in and around the base and approach corridors have not been declared “unlivable.” One of the other JLUS recommendations is to work with our Congressional delegation to secure a Department of Defense funded and administered program for noise attenuation retrofitting existing homes in the high noise zones that is similar to the program that TIA has had in operation since 1992. There is no plan to purchase the existing homes in the high noise areas.

Question 2) Who were the people who gave residential input into the JLUS and why did they not inform the Arroyo Chico Neighborhood Association?

Answer: The Arizona Department of Commerce managed the JLUS process. They established a Policy Advisory Committee and a Working Group (membership listed below). The Policy Advisory Committee met monthly. There were two open public meetings last year with the Joint Land Use Study (JLUS). These two public meetings were an outreach to the local community with approximately 100 to 125 people in attendance. The City also held a public meeting earlier this year to go over the JLUS adoption process. All members of the public were invited to attend and announcements of the meetings were provided to the local news media as well as invitations to all of the representatives of registered neighborhood associations in the City.

- **Policy advisory committee members (PAC)**

Dennis Alvarez, District Engineer, Arizona Department of Transportation
Calvin Baker, Superintendent, Vail Unified School District
Jack Camper, President, City of Tucson Chamber of Commerce
Dr. William Carrell Jr., DM-50
Ray Carroll, Pima County Supervisor, District 4
Bob Currieo, Staff Assistant to U.S. Senator John McCain
Andy Gunning, Regional Planning Director, Pima Association of Governments
John Hart and Sheila Wilson, Rita Ranch Neighborhood Association
Greg Keller, Arizona State Land Department
Jay Kittle, Mariposa Properties
Steve Leal, City Council Member, City of Tucson, Ward 5
Jan Leshner, Director, Governor’s Southern Arizona Office
Al Levin, Owner
Alan Lurie, consultant, Southern Arizona Home Builders Association
Kay McLoughlin, Office of U.S. Representative Jim Kolbe, Arizona’s 8th District

Jill Merrick, Tucson Airport Authority
Austin Nunez, Board Chairman, San Xavier District
Kevin Oberg, Kolb Road Partners
Robert Patrick, Planning Commissioner, City of Tucson
Shirley Scott, Vice Mayor, City of Tucson, Ward 4
Shalini Sen, District Planner, Tucson Unified School District
Victor Soltero, Arizona State Senator, District 29
Priscilla Storm, Diamond Ventures, Inc.
Robert Walkup, Mayor, City of Tucson
Bruce Wright, University of Arizona Office of Economic Development

- **Working group and project team members**

Chris Bagnati, Davis-Monthan Air Force Base
Kendall Bert, City of Tucson Economic Development Office
Lt. Col. Karl Bosworth, Davis-Monthan Air Force Base
Maj. Gary Carruthers, Davis-Monthan Air Force Base
Ben Changkakoti, Pima County Development Services Department
John DeMartino, Parsons
Bob Duchek, Parsons
Bob Ernst, Parsons
Tracey Ferguson, Parsons
Heather Garbarino, Arizona Department of Commerce
Anders Hauge, Parsons
Alan Maguire, The Maguire Company
Janie McLaury, Davis-Monthan Air Force Base
Bryant Monroe, Department of Defense Office of Economic Adjustment
Sarah More, City of Tucson Comprehensive Planning Task Force
Gary Presley, Davis-Monthan Air Force Base
Gene Santarelli, S'relli Consulting, LLC
Steve Smith, Parsons
Col. Michael Spencer, Davis-Monthan Air Force Base
Col. Lawrence Stutzriem, Davis-Monthan Air Force Base
Deb Sydenham, Arizona Department of Commerce
Mike Toriello, Davis-Monthan Air Force Base
Jim Veomett, Pima County Development Services Department

Question 3) Why don't planes both land and take off to the South to avoid impact on residences to the NW of the base, most of which were built during a time of almost inactivity at D-M right after WWII?

Answer: Davis-Monthan tower and air-traffic control personnel determine the takeoff and landing directions based on wind directions/speed and the operating runway at Tucson International Airport. For safety reasons, DM and TIA operate on the parallel runways. While normal FAA guidelines direct that the active runway should be a runway with a five knot or more headwind, DM modifies that in order to reduce the noise impact northwest of DM. DM will operate to the southeast with up to a ten knot tailwind.

Safety considerations dictate that DM operates from one runway – i.e. takeoff and landing in the same direction. To mix the departure and arrival directions (launch to the southeast while landings from the southeast) would create a significant risk to aircraft – both fighter and commercial aircraft.

The exception to this policy occurs with emergency aircraft. With an emergency aircraft, DM makes all attempts to recover the aircraft from the southeast. For these rare occasions, air traffic control and pilot vigilance allows this approach to be safe. [This response provided by Davis-Monthan.]

Question 4) The zoning overlay change is being done in anticipation of the F35, Joint Strike Fighter. Will these planes definitely come to Tucson? Is so, when will they come?

Answer: The purpose of the overlay zone change is for planning purposes, to better prepare for future mission changes at the base. At this time, no decision has been made regarding basing of the F-35. In fact, this aircraft is still in development and no decisions regarding production have been made. Given the location of the base to the Barry M. Goldwater Range, the weather conditions in Tucson, and other factors, we expect Davis-Monthan to operate as an Air Force training base for many years to come. At some time, new missions/aircraft will be assigned to DM and the City should have noise contours and regulations in place to prepare for that.

Question 5) If there is doubt that the F35 will come, why do the zoning overlays change now (other than the fact that a state law dictates the change)?

Answer: See number 4 above.

Question 6) What peak dB levels will these planes have at typical landing heights over the houses to the NW of D-M? What peak dB levels do current plans have at these heights?

Answer: Davis-Monthan should answer this question.

Question 7) The 65-69 Ldn contour is based on a day-night average which tends to obscure peak values. It states in the JLUS study that a single incident of greater than 74dB at night will wake up 75% of people. DM plans for more night flights in the future. Wouldn't most jets exceed the 74 dB level?

Answer: Davis-Monthan should answer this question.

Question 8) We have heard estimates from 2-5 times as loud as current sound levels for the new planes. Which is the most likely number? If the planes will be 4 times louder than the A-10 or 4 times louder than which plane? Is it 130dB at which hearing damage occurs? Aren't children even more susceptible than adults to hearing loss?

Answer: Davis-Monthan should answer this question.

Question 9) Heavier hydrocarbon chains tend to linger in the air as a result of use of JP 8 jet fuel (compared to the old JP 4 jet fuel). Although this fuel has been in use since the early 1990's, its results on health have been minimally investigated, and its effects are unclear. Are there any plans to study the health effects, since jets fly overtop a major metropolitan center daily?

Answer: Davis-Monthan should answer this question.

Question 10) The constitution of the state of Arizona (Article 2, Section 17) states "No private property shall be taken or damaged for public or private use without just compensation having first been made..." Legally labeling a home as unlivable (and establishing flight corridors) seems to be clear evidence of

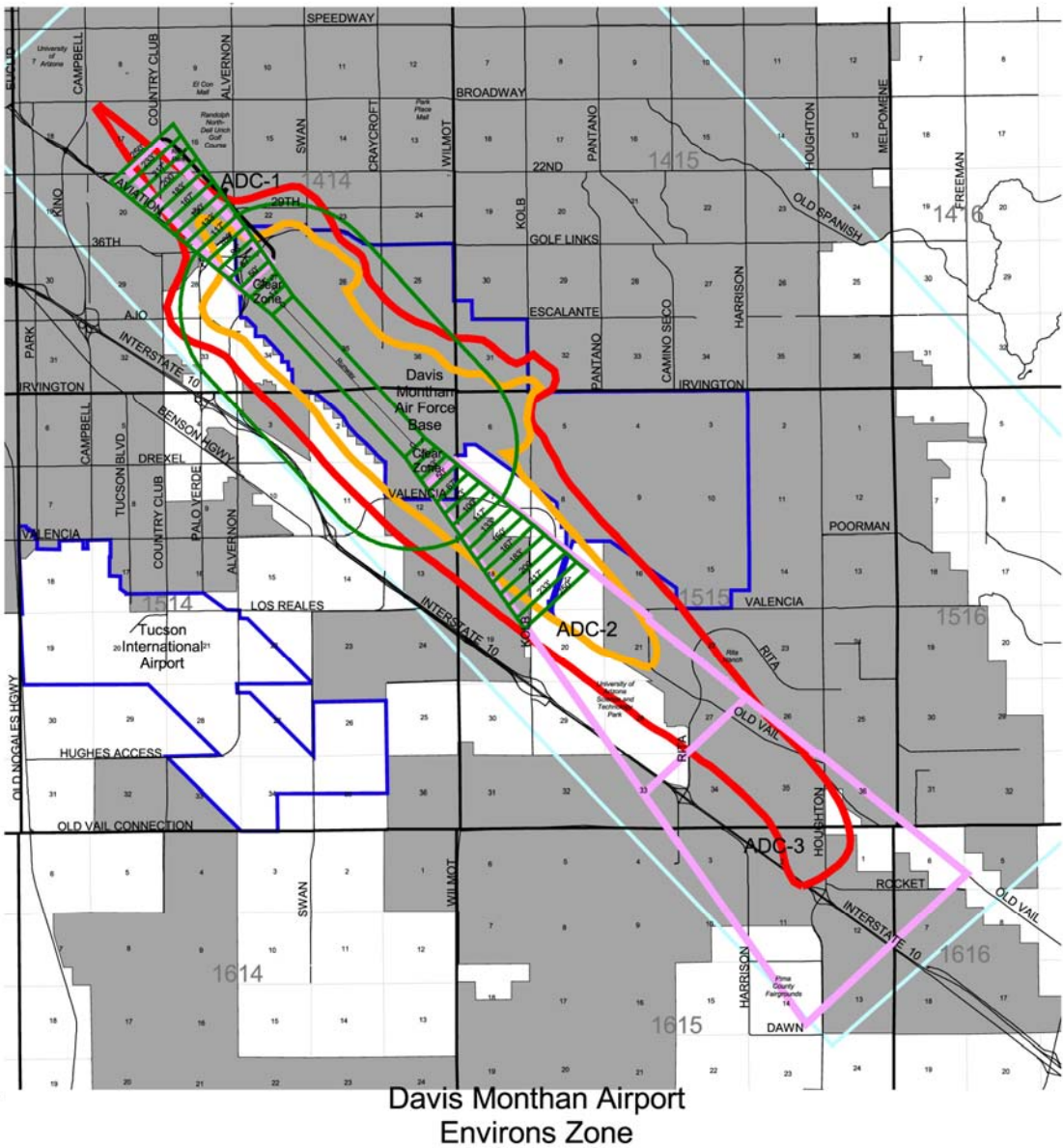
damage. The City has stated that they intend to give no compensation. How is this possible given the strong wording in the state constitution?

Answer: As long as there is a viable use of a property there is not a taking. The flight paths have been existence for decades and the homes in the area have not been labeled unlivable or condemned.

Question 11) Is it really mathematically impossible to achieve a protest in the affected area (due to the high percentage of government owned land), especially now that an exemption has been granted to the U of A? Might we please have a list of the names and addresses of people in the “area located within a 150 foot radius of the parcel proposed for rezoning” as stated in the initial notification sent to property owners?

Answer: There are five areas in which the City must calculate protest percentages: within the district itself (the entire DM AEZ, over 19,000 acres); and in any one direction (North, South, East, or West) from the district within 150 feet of the boundary. It is not mathematically impossible to achieve a 20% protest level in any of the areas. An exemption has not been granted to the University of Arizona. The notification list is available to the public for the cost of copying (or, for free via email, which has already been done), it includes all of the property owners within the district and within 300+ feet of the boundaries. There is no listing of property owners solely within the 150-foot protest area. A map has been prepared clearly indicating where the boundaries of the district and the four areas within the 150-foot protest area. Parcel specific information about the noise contours is available on MapGuide at <http://www.dot.co.pima.az.us/gis/maps/mapguide/>.

AIRPORT ENVIRONS ZONE (AEZ)



- Legend
- Airport Hazard District (Height Zones)
 - Proposed ADC's
 - Proposed 65 Noise Contour (NCD-A)
 - Proposed 70 Noise Contour (NCD-B)
 - Vicinity Boundary
 - City of Tucson



DRAFT SOUND ATTENUATION DEVELOPMENT STANDARDS

Requirements for a noise level reduction of 25 dB.

A. Compliance. Compliance with this section shall be deemed to meet requirements for a minimum noise level reduction (NLR) of 25 decibels.

B. Exterior Walls.

1. Exterior walls, other than as described in this section, shall have a laboratory sound transmission class rating of at least STC-30; or
2. Masonry walls having a weight of at least 25 pounds per square foot do not require a furred (stud) interior wall. At least one surface of concrete block walls shall be plastered.
3. Stud walls shall be at least 4 inches in nominal depth and shall be finished on the outside with solid sheathing under an approved exterior wall finish.
 - a. Interior surface of the exterior walls shall be gypsum board or plaster at least 1/2 inch thick, installed on the studs.
 - b. Continuous composition board, plywood or gypsum board sheathing at least one-half (1/2) inch thick shall cover the exterior side of the wall studs.
 - c. Sheathing panels shall be covered on the exterior with overlapping building paper.
 - d. Insulation material at least R-11 shall be installed continuously throughout the cavity space behind the exterior sheathing and between wall studs. Insulation shall be glass fiber or mineral wool.

C. Exterior Windows.

1. Windows other than as described in this section shall have a laboratory sound transmission class rating of at least STC-28; or
2. Glass shall be at least 3/16" thick.
3. All openable windows shall be weatherstripped and airtight when closed so as to conform to an air infiltration test not to exceed 0.5 cubic foot per minute per foot of crack length in accordance with ASTM E-283-65-T.
4. Glass shall be sealed in an airtight manner with a non-hardening sealant or a soft elastomer gasket or gasket tape.
5. The perimeter of window frames shall be sealed airtight to the exterior wall construction with a sealant conforming to one of the following Federal specifications: TT-S-00227, TT-S-00230 or TT-S-00153.

DRAFT SOUND ATTENUATION DEVELOPMENT STANDARDS

D. Exterior Doors.

1. Doors other than as described in this section shall have a laboratory sound transmission class rating of at least STC-26; or
2. All exterior side-hinged doors shall be solid-core wood or insulated hollow metal at least 1-3/4" thick and shall be fully weatherstripped;
3. Exterior sliding doors shall be weatherstripped with an efficient airtight gasket system with performance as specified in Section (c). The glass in the sliding doors shall be at least 3/16" thick.
4. Glass, over two square feet in area, in doors shall be sealed in an airtight non-hardening sealant or in a soft elastomer gasket or glazing tape;
5. The perimeter of door frames shall be sealed airtight to the exterior wall construction as described in Section C(4).

E. Roofs.

1. Combined roof and ceiling construction other than described in this paragraph and in paragraph F shall have a laboratory sound transmission class rating of at least STC-39; or
2. With an attic or rafter space at least 6" deep, and with a ceiling below, the roof shall consist of 1/2" composition board, plywood or gypsum board sheathing topped by roofing as required;
3. Open beam roof construction shall follow the energy insulation standard method for batt insulation;
4. Skylights shall conform to the window standard in paragraph C..

F. Ceilings.

1. Gypsum board or plaster ceilings at least 1/2 inch thick shall be provided where required by paragraph E(2), above. Ceilings shall be substantially airtight with a minimum of penetrations.
2. Glass fiber, cellulose or mineral wool insulation at least R-38 shall be provided above the ceiling between joists.

G. Ventilation.

1. A ventilation system shall be installed that will provide the minimum air circulation and fresh air supply requirements for various uses in occupied rooms without the need to open any windows, doors or other openings to the exterior. The inlet and

DRAFT SOUND ATTENUATION DEVELOPMENT STANDARDS

discharge openings shall be fitted with sheet metal transfer ducts of at least 20 gauge steel, which shall be lined with 1 inch thick coated glass fiber, and shall be at least 5 feet long with one 90 degree bend.

2. Gravity vent openings in attics shall be as close to code minimum in number and size, as practical.

3. Bathroom, laundry and similar exhaust ducts connecting the interior space to the outdoors, shall contain at least a 5-foot length of internal sound-absorbing duct lining. Exhaust ducts less than 5 feet in length shall be fully lined and shall also meet the provisions of paragraph C. Each duct shall be provided with a bend in the duct such that there is no direct line-of-sight through the duct from the venting cross-section to the room-opening cross-section. Duct lining shall be coated glass fiber duct liner at least 1 inch thick.

4. Fireplaces shall be provided with well fitted dampers.